Fig. 1

1

2

4

7

10

10

10

Fig. 2

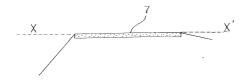


Fig. 3

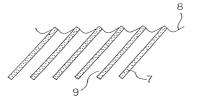
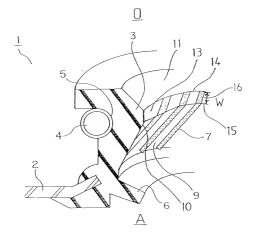
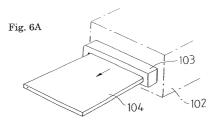


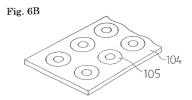
Fig. 4

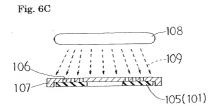
| Irradiation dose(Mrad) | Hardness (JIS A) | | |
|------------------------|------------------|--|--|
| non-irradiated | 78 | | |
| 10 | 84 | | |
| 20 | 85 | | |
| 50 | 84 | | |

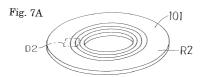
Fig. 5

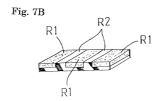


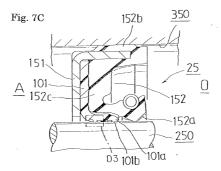












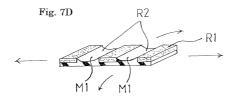


Fig. 8A

Fig. 8B

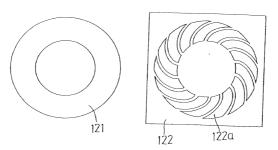


Fig. 8C

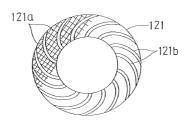
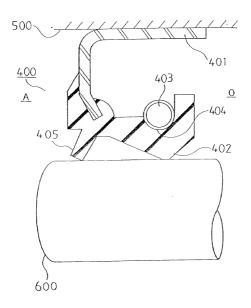


Fig. 9 $$\rm ^{\circ}$$ Relation between irradiation dose and mechanical properties

| | | Irradiation átmosphere | Irradiation dose (Mrad) | Modulus of elasticity at 100% elongation (Mpa) | Strength at break (Mpa) |
|--------------|---------------------------------------|---------------------------|-------------------------------|--|-------------------------------|
| Example 1 | Polymer only | N ₂ | 0 | 1.5 | 1.1 |
| | | N_2 | 10 | 1.5 | 3.5 |
| | | N_2 | 20 | 1.5 | 2.8 |
| | | N_2 | 50 | 1.5 | 2.9 |
| Example 2 | Composition having carbon black | N_2 | 0 | 6.5 | 4.2 |
| | | N ₂ | 10 | 6.8 | 11.0 |
| | | N ₂ | 20 | 8.1 | 10.8 |
| | | N ₂ | 50 | 10.5 | 10.3 |

Fig. 10



Sheet 9 of 11

Fig. 11

400

401

405

A

Fig. 12

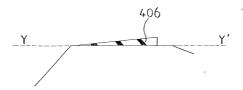


Fig. 13

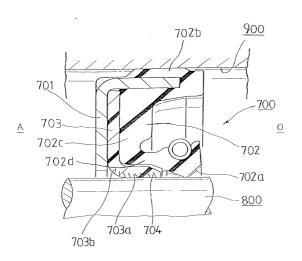


Fig. 14A

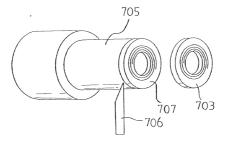


Fig. 14B

